UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,024	07/16/2003	Hironari Kobayashi	393032039400	1163

25224 7590 07/10/2007

MORRISON & FOERSTER, LLP
555 WEST FIFTH STREET
SUITE 3500
LOS ANGELES, CA 90013-1024

EXAMINER	
CHIO, TAT CHI	

ART UNIT	PAPER NUMBER
2621	

MAIL DATE	DELIVERY MODE
07/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/621,024	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Tat Chi Chio	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,8-10 and 12-20* is/are rejected.

7)☒ Claim(s) *2,7 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/16/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

> Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.
>
> Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)(discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).
>
> In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory matter as follows. Claims 17-20 define a program embodying functional descriptive material. However, the claims do not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most

cases since use of technology permits the function of descriptive material to be realized"). That is, the scope of the presently claimed a program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-6, 8-10, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanda (US 2001/0041049 A1) in view of Yamauchi (5,956,090).

Consider claims 1, 13, and 17, Kanda teaches an apparatus for recording operation information in association with video or music reproduced by a reproduction device, said apparatus comprising: a timer that generates a first time code (Fig. 14 of Kanda); an operator section that includes one or more operators and arranged to generate operation data by detecting an operational state of each of said operators (Fig. 1 of Kanda); a storage section (10 of Fig. 2 of Kanda); a control section that causes said storage section to store the operation data of each of said operators, generated by said

operator section, along with said first time code generated by said timer ([0459] of Kanda); a reception section that receives a second time code given by the reproduction device, in relation to the video or music reproduced by the reproduction device (Fig. 14 of Kanda); but fails to explicitly teach that a time code correction section that corrects said first time code, generated by said timer, on the basis of said second time code received by said reception section and the second time code being of lower resolution than said first time code.

Yamauchi teaches a time code correction section that corrects said first time code, generated by said timer, on the basis of said second time code received by said reception section and the second time code being of lower resolution than said first time code (col. 3, lines 7-59 and col. 4, lines 32-37 of Yamauchi). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a time code correction section to an input video signal having time codes from a first television standard to a second television standard.

Consider claim 3, Kanda and Yamauchi teach an apparatus which further comprises: a designation section that designates a type of second time code to be received by said reception means, from among a plurality of types of second time code of different resolution (the type of second time code to use is dependent on the type of standard of the input signal, col. 3, lines 46-59 and col. 4, lines 32-37 of Yamauchi); a retention section that retains a second time code of the type, designated by said designation section, as a current time code (10 of Fig. 2 and [0459] of Kanda); an updating section that converts said first time code, generated by said timer, into a

second time code having the resolution of the designated type in accordance with the designated type and updating the current time code, retained by said retention section, with the second time code having the resolution of the designated type (col. 3, lines 46-59 and col. 4, lines 32-37 of Yamauchi); and a display section that displays the current time code retained by said retention section ([0091] of Kanda).

Consider claim 4, Yamauchi further teaches an apparatus wherein said time code correction section converts a value of said second time code into a value having the resolution of said first time code, in accordance with a ratio between the resolution of said first time code and the resolution of said second time code, and then sets the converted value in said timer as said first time code (col. 3, lines 7-59 of Yamauchi).

Consider claims 5, 14, and 18, Kanda and Yamauchi teach an apparatus for reproducing operation information in association with video or music reproduced by a reproduction device, said apparatus comprising: a timer that generates a first time code (Fig. 14 of Kanda); a storage section that stores operation data, indicative of an operational state to be taken by at least one operator, along with time information indicative of a reproducing time when the operation data is to be reproduced (10 of Fig. 2 of Kanda); a control section that reads out, from said storage section, the operation data for which the reproducing time has arrived, in accordance with a progression of said first time code generated by said timer (10 of Fig. 2 of Kanda); a reception section that receives a second time code given by the reproduction device, in relation to the video or music reproduced by the reproduction device, said second time code being of lower resolution than said first time code (Fig. 14 of Kanda); and a time code correction

section that corrects said first time code, generated by said timer, on the basis of said second time code received by said reception section, to thereby provide a corrected first time code (col. 3, lines 7-59 and col. 4, lines 32-37 of Yamauchi); wherein said control section reads out, from said storage section, each operation data for which the reproducing time has arrived, in accordance with a progression of the corrected first time code so that the operation data is reproduced from said storage section in association with the video or music reproduced by the reproduction device ([0266] of Kanda).

Consider claims 6, 15, and 19, Kanda teaches an apparatus which further comprises an operator section that includes one or more operators, an operational state of each of said operators being capable of being automatically set, and wherein, when given operation data is read out from said storage section by said control section, a corresponding one of said operators in said operator section is automatically set to an operational state in accordance with the read-out operation data ([0266] of Kanda).

Consider claim 8, Kanda and Yamauchi teach an apparatus which further comprises: a designation section that designates a type of second time code to be received by said reception means, from among a plurality of types of second time code of different resolution (the type of second time code to use is dependent on the type of standard of the input signal, col. 3, lines 46-59 and col. 4, lines 32-37 of Yamauchi); a retention section that retains a second time code of the type, designated by said designation section, as a current time code (10 of Fig. 2 and [0459] of Kanda); an updating section that converts said first time code, generated by said timer, into a

second time code having the resolution of the designated type in accordance with the designated type and updating the current time code, retained by said retention section, with the second time code having the resolution of the designated type (col. 3, lines 46-59 and col. 4, lines 32-37 of Yamauchi); and a display section that displays the current time code retained by said retention section ([0091] of Kanda).

Consider claim 9, Yamauchi further teaches an apparatus wherein said time code correction section converts a value of said second time code into a value having the resolution of said first time code, in accordance with a ratio between the resolution of said first time code and the resolution of said second time code, and then sets the converted value in said timer as said first time code (col. 3, lines 7-59 of Yamauchi).

Consider claims 10, 16, and 20, Kanda and Yamauchi teach a time code generating apparatus comprising: a timer section that generates a first time code in accordance with passage of time (Fig. 14 of Kanda); a designation section that designates a type of time code from among a plurality of types of time code of different resolution (the type of second time code to use is dependent on the type of standard of the input signal, col. 3, lines 46-59 and col. 4, lines 32-37 of Yamauchi); a retention section that retains, as a current time code, a time code varying over time with a resolution of the type designated by said designation section (10 of Fig. 2 and [0459] of Kanda); and an updating section that converts said first time code, generated by said timer section, into a second time code having the resolution of the designated type in accordance with the designated type and updating the current time code, retained by said retention section, with the second time code having the resolution of the

designated type, wherein the current time code retained by said retention section is outputted (col. 3, lines 46-59 and col. 4, lines 32-37 of Yamauchi).

Consider claim 12, Kanda teaches a time code generating apparatus, which further comprises a display section that displays the current time code, outputted by said retention section ([0091] of Kanda).

Allowable Subject Matter

3. Claims 2, 7, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tat Chi Chio whose telephone number is (571) 272-9563. The examiner can normally be reached on Monday - Thursday 8:30 AM-6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571)-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TCC